

~~CONFIDENTIAL~~4th October, 1960COCOM Document 4177COORDINATING COMMITTEERECORD OF DISCUSSIONONPROPOSED GERMAN EXPORT TO RUMANIA OF FOUR TWO-TONE TELEGRAPHTRANSMISSION TERMINAL STATIONS29th September, 1960

Present: Belgium (Luxembourg), Canada, France, Germany, Italy, Netherlands, Turkey, United Kingdom, United States.

References: COCOM Documents 3667, 3701, 4131.

1. The CHAIRMAN drew the Committee's attention to a Memorandum by the German Delegation (COCOM Document 4131) concerning the proposed delivery to Rumania of four two-tone telegraph transmission terminal stations. He invited Delegates to express their Governments' views.
2. The UNITED STATES Delegate stated that his authorities raised no objection. They had noted the justification put forward, to the effect that telecommunications and transit had increased in the area. They were concerned with the cumulative effect of shipments of this nature and the Delegate stressed that this would be an important factor in considering any future cases of this particular type.
3. There were no objections from other Delegations. The FRENCH Delegate added that the French technical expert who was present would be prepared, if the Committee wished, to give a technical explanation demonstrating the obsolete nature of the equipment involved.
4. The GERMAN Delegate thanked his colleagues for the favourable views expressed. In view of the fact that it was not as yet certain that Item 1523 would be discussed during the annual List Review, the Delegate said he would be happy to hear any technical arguments which the French expert could provide.
5. The FRENCH expert stated that the equipment whose export was proposed by the German Delegation was of an old type, which had first been produced 35 years previously. It was well known to all technicians specialising in long-distance communication systems. It included 6 channels because it had been designed to make use of existing telephone cables. He then explained the disadvantages of the system. The bandwidth provided (300 - 3,000 cycles (Hertz)) was considerable in relation to the width actually utilised, which was in the region of 800 cycles (Hertz). As compared with more modern systems, the equipment was poor from the point of view of transmission capacity: without revealing recent research developments, he could affirm that experiments using the same bandwidth had succeeded in obtaining five to six times the number of communications the equipment in question would provide. Moreover, this equipment would be uneconomic, not only on account of the cost of the cable used, but also because it would be liable to interference caused either by defective cables or by earth currents. In view of the increased traffic to which reference had been made, it would have been preferable to have adopted much more modern equipment. This, however, would necessarily have involved changing the infrastructure completely. It was to be

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remembered that this was not a matter of a point-to-point link-up, but of the establishment of a long-distance service; when, therefore, a complete new section was to be equipped - which, as the German Delegation had pointed out, was the case here - account had to be taken of the material already in service.

6. The GERMAN Delegate thanked the French Delegation and their expert. He considered that the information given was corroborated by the fact that no cables had been asked for and that the supplementary equipment was required only by Rumania. Hungary had asked for none.

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